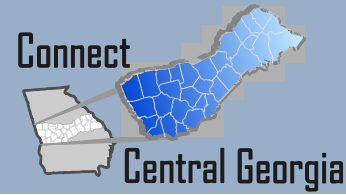




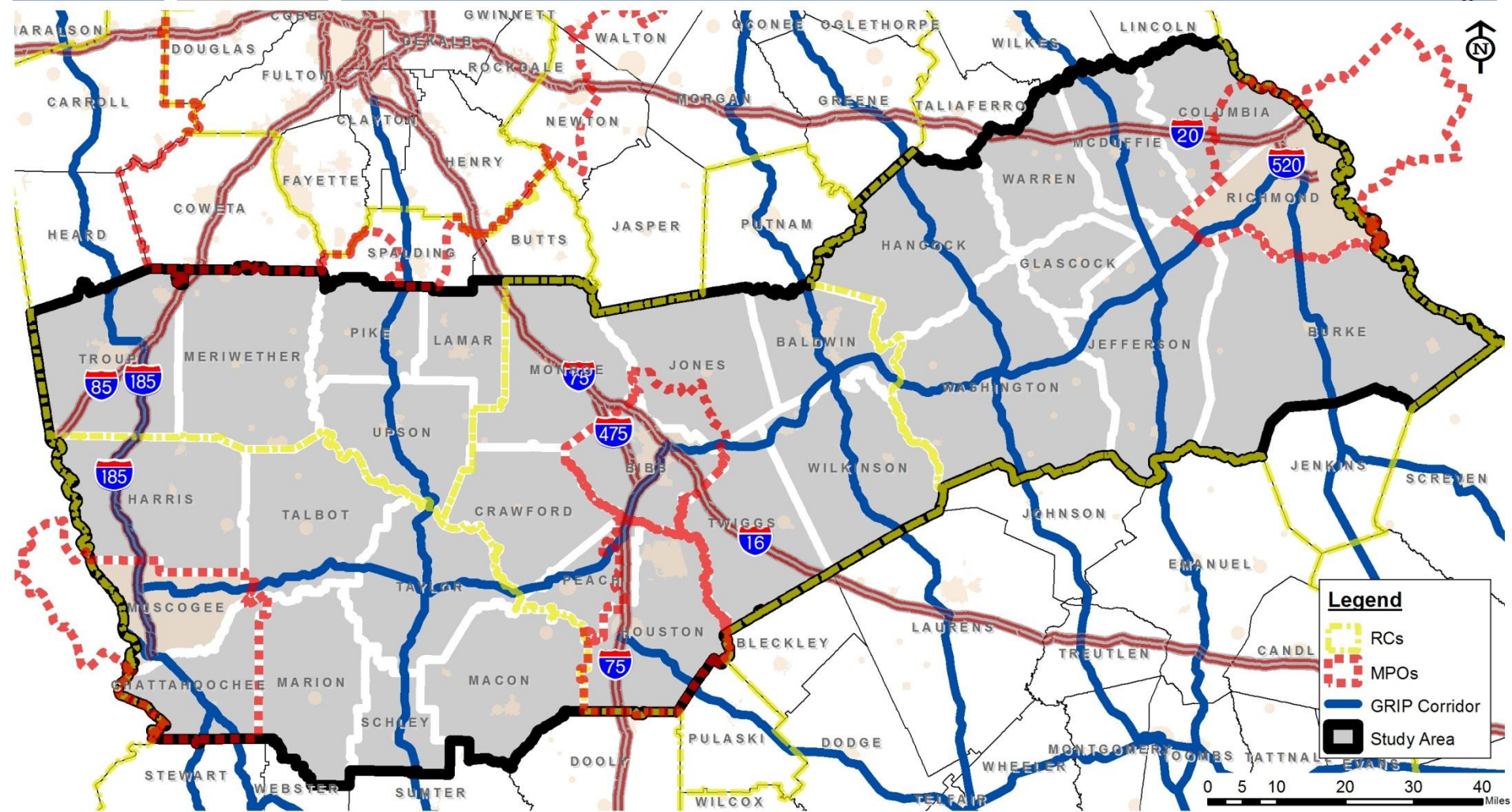
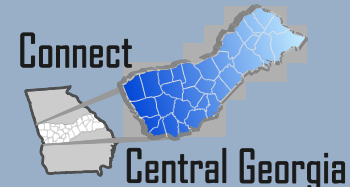
April 26, 2012

Agenda

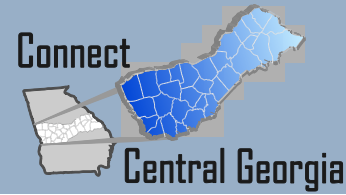


- Study Progress
- Stakeholder & Public Input
- Scenario Building
 - Future Conditions (2035)
- Economic Analysis
 - Economic Case Studies
- Development of Improvement Strategies
 - Group Activity

Study Progress Study Area

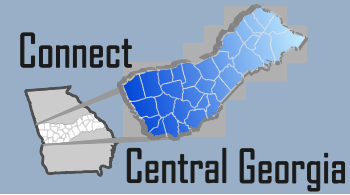


Study Progress Work Tasks

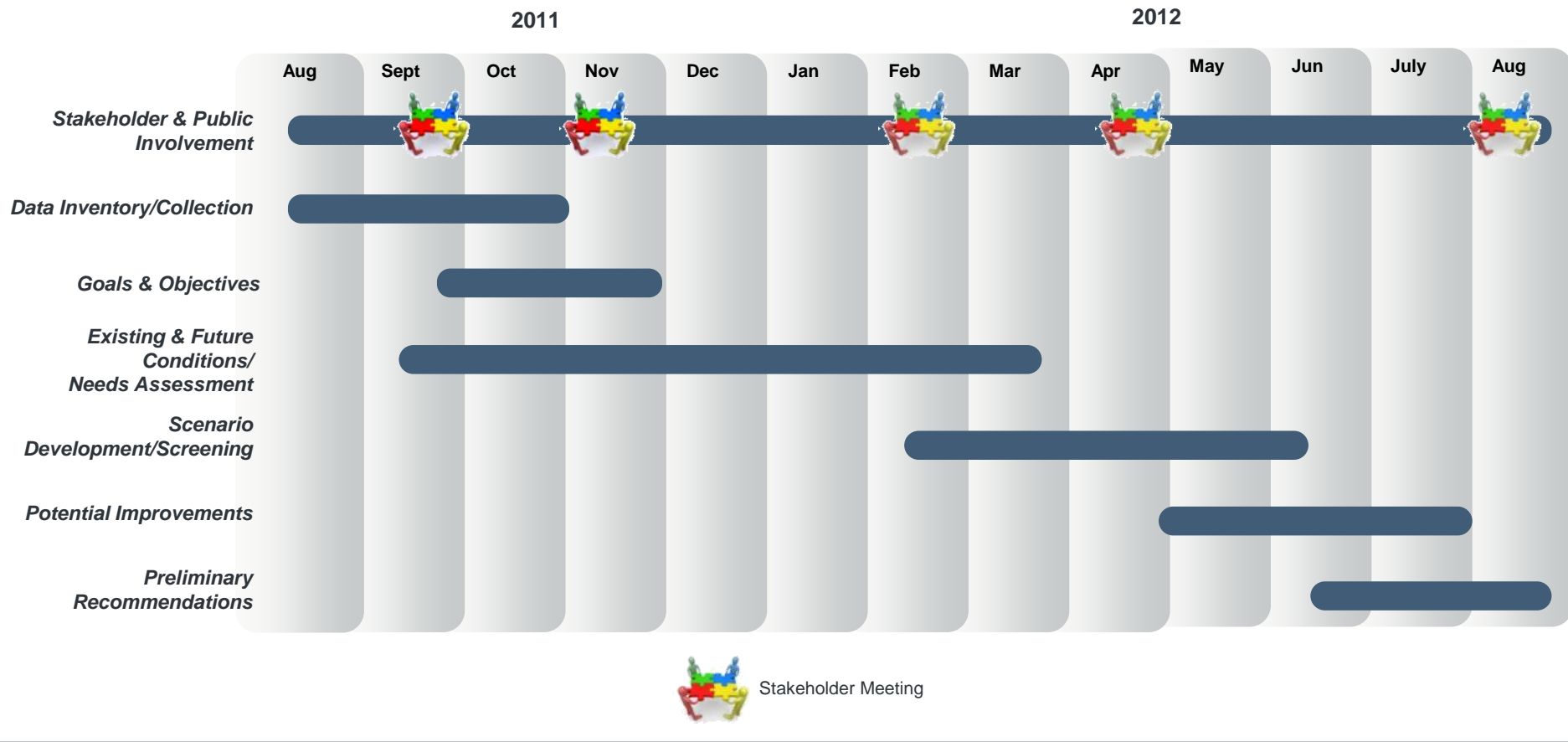


- Stakeholder & Public Involvement (Ongoing)
- Data Inventory/Collection (Complete)
- Goals & Objectives (Complete)
- Existing Conditions (Complete)
- Future Conditions – No Build (Complete)
- Scenario Development & Screening (Today)
- Future Conditions – Scenarios (Today)
- Potential Improvements Strategies (Today)
- Preliminary Recommendations Development & Evaluation (Late Summer 2012)

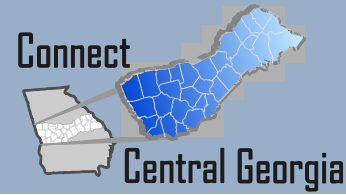
Study Progress Schedule



STUDY SCHEDULE

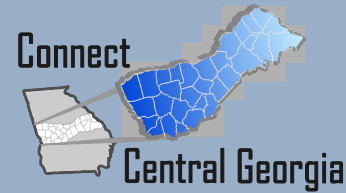


Study Progress Goals & Objectives

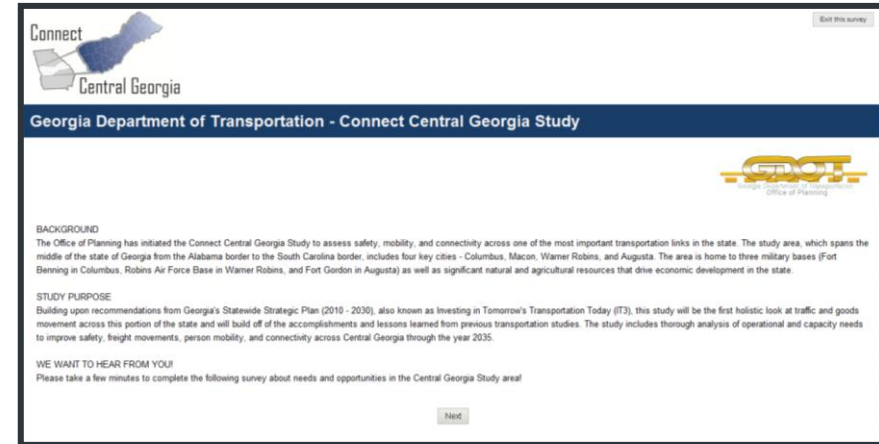


1. Improve **safety**, **accessibility**, and **mobility** options available to people and for freight.
2. Enhance the inter-regional **connectivity** of the transportation system for people and freight.
3. Promote **efficient** system management and operation.
4. Emphasize the **preservation** of the existing transportation system.
5. Protect **quality of life**, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.

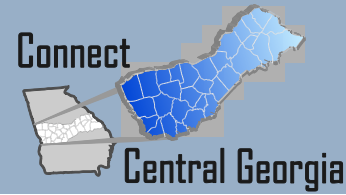
Stakeholder & Public Input Regional Public Outreach



- Activities to Date
 - Public Survey - 2,600 Surveys!
 - School System
 - Public Libraries
 - Study Stakeholders
 - MPO Meetings
 - RC Meetings
 - Kaolin Festival
 - Cherry Blossom Festival
 - News Interview/Press

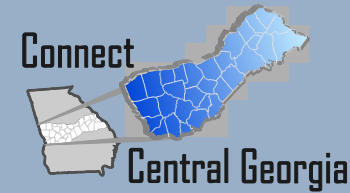


Scenario Building



- Provides a comparison of multiple factors
 - Transportation
 - Land Use
 - Economic Development
- Reflects how various scenarios could impact the transportation network

Scenario Building



1

How should we get started?



Scope the effort and engage partners.

Considerations: Process goals, objectives, budget, and stakeholder roles and responsibilities.

Output: Work plan.

2

Where are we now?



Establish baseline analysis. Identify factors and trends that affect the state, region, community, or study area.

Considerations: Transportation and land supply, suitability, and demand; state, regional, community, or study-area trends.

Outputs: Transportation systems inventory, land suitability analysis, evaluation of historical trends.

3

Who are we and where do we want to go?



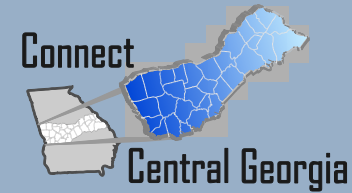
Establish future goals and aspirations based on values of the state, region, community, or study area.

Considerations: Key values and priorities for the state, community, region, or study area.

Outputs: Set of working principles that document broad state, community, region, or study-area goals and preferences.

Source: FHWA Scenario Planning Guidebook

Scenario Building



4

What could the future look like?



Create baseline and alternative scenarios.

Considerations: Scenario types, analysis tools, travel demand model.

Outputs: Identification of appropriate scenario analysis tool or refinement of travel demand model; baseline and alternative scenarios.

5

What impacts will scenarios have?



Assess scenario impacts, influences, and effects.

Considerations: Indicators to help evaluate scenario performance.

Outputs: Refined or calibrated analysis tool(s) or model(s) if necessary; list of indicators to compare scenario outcomes; qualitative or quantitative assessment of scenario impacts.

6

How will we reach our desired future?

Craft the comprehensive vision. Identify strategic actions and performance measures.

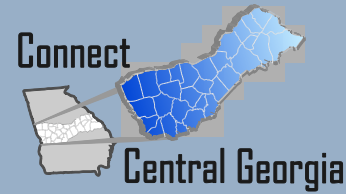
Considerations: Stakeholder feedback on scenarios and the future blueprint; potential actions, investments, or policies to lead the state, community, region, or study area toward the comprehensive vision.

Outputs: Comprehensive vision; action steps; performance measures to assess progress; plan for monitoring progress.

Source: FHWA Scenario Planning Guidebook

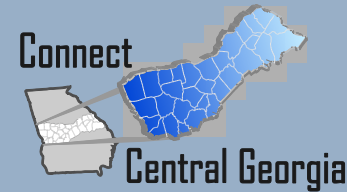
Scenario Building

What Could the Future Look Like?

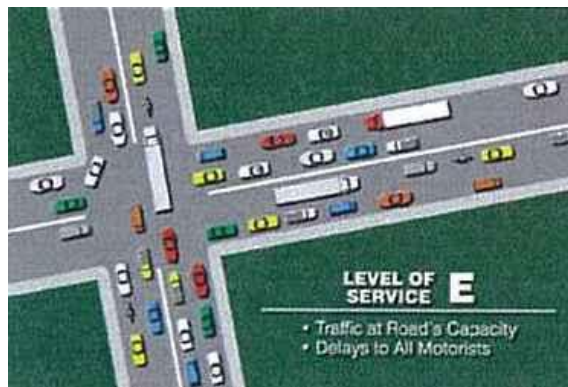
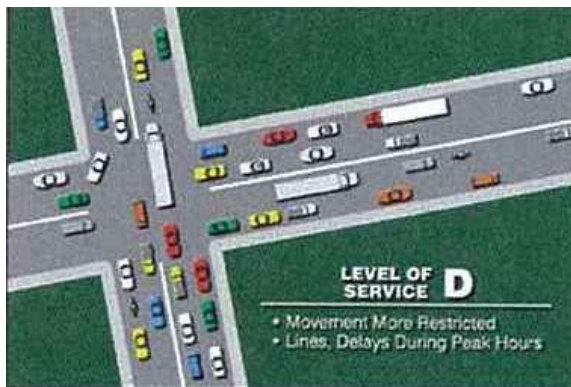


- Scenarios
 1. What if the Central Georgia region grows slower than expected?
 2. What if the demand for freight is stronger than expected?
 3. Do the TIA projects address all transportation needs in the study area through 2035?

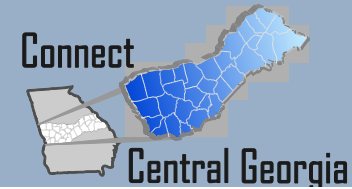
Future Conditions (2035) Capacity Analysis



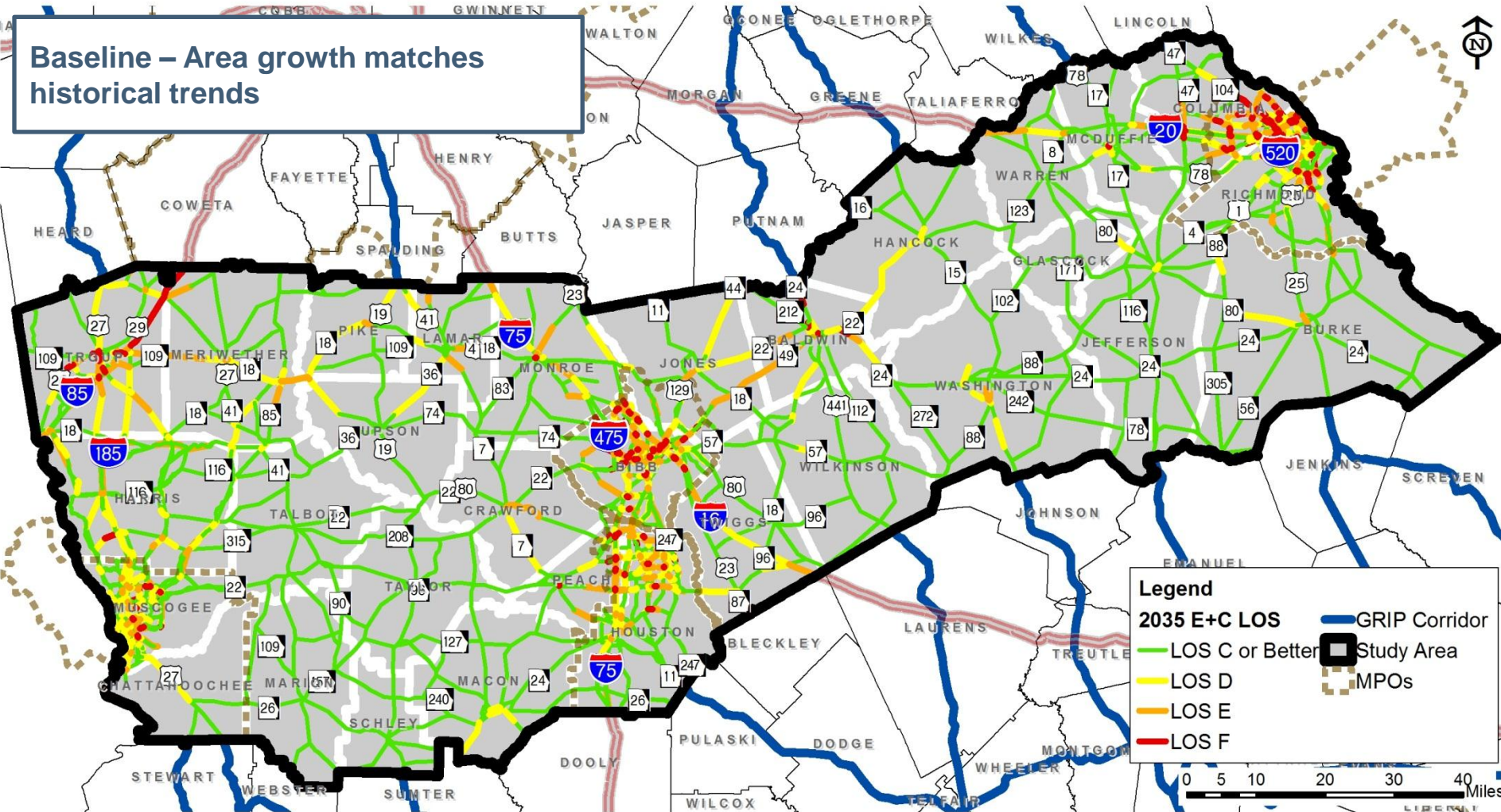
- Level of Service (LOS)
 - Qualitative Measure of Traffic Flow Used to Describe Operating Conditions from the Perspective of Travelers



Future Conditions (2035) Baseline Capacity Analysis

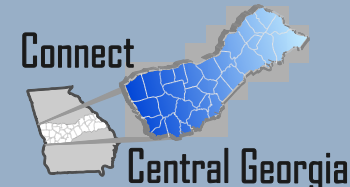


Baseline – Area growth matches
historical trends

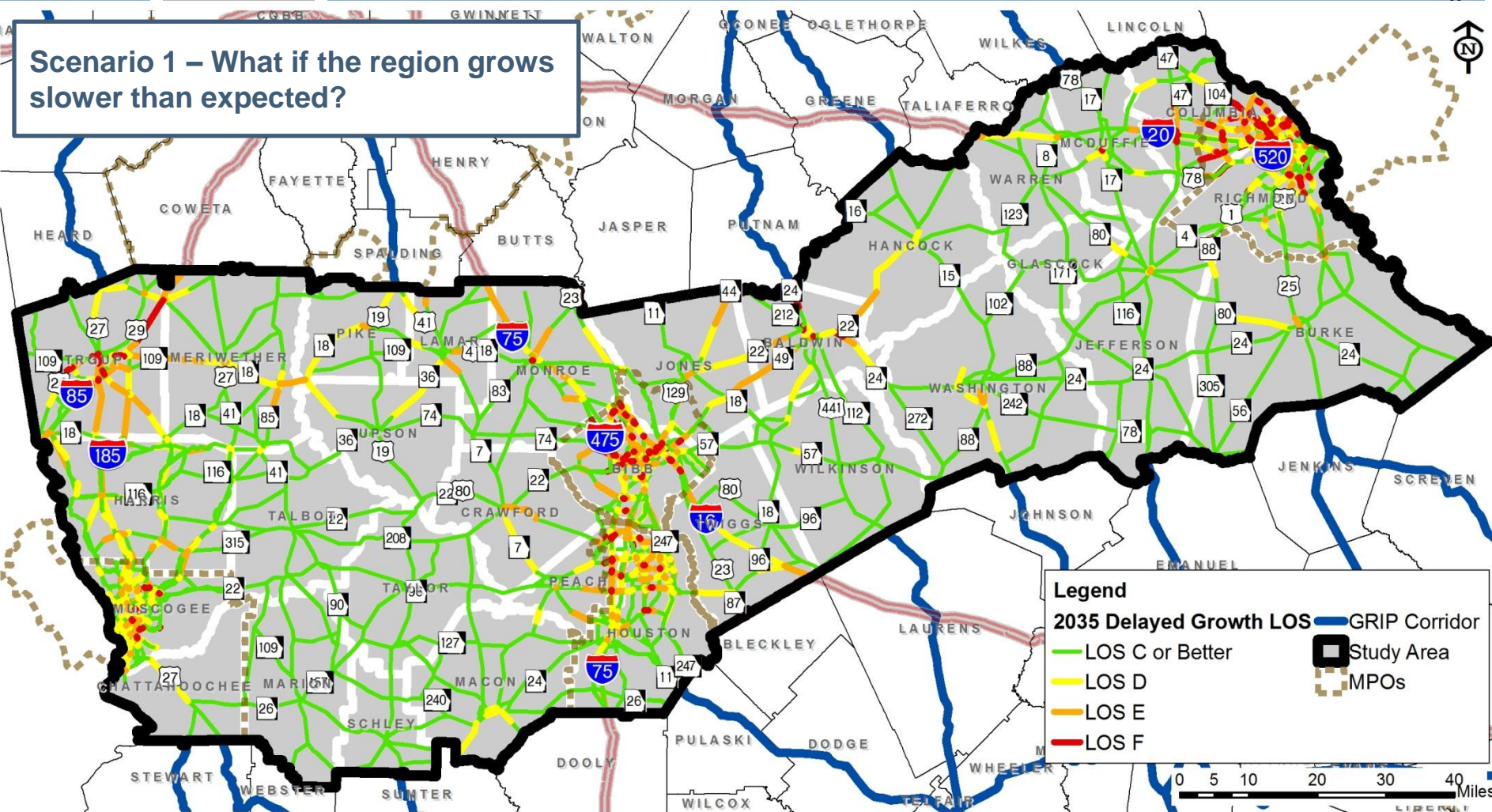


Source: 2020/2040 Georgia Statewide Model, 2035 CPCMO Model, 2035 MATS Model, 2035 WRATS Model, and 2035 ARTS Model

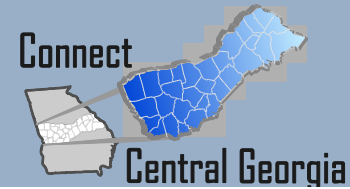
Future Conditions (2035) Scenario 1 Capacity Analysis



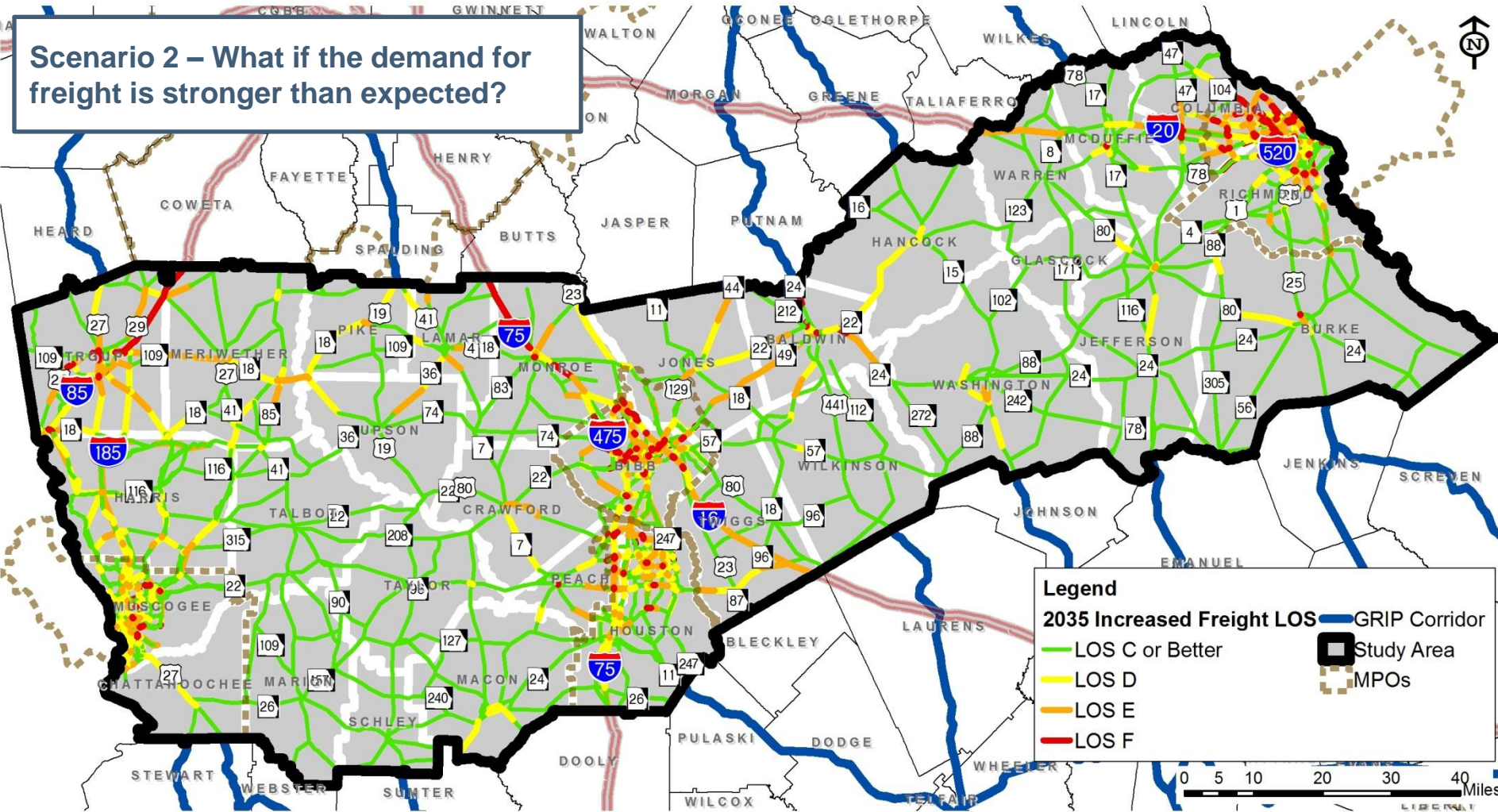
Scenario 1 – What if the region grows slower than expected?



Future Conditions (2035) Scenario 2 Capacity Analysis

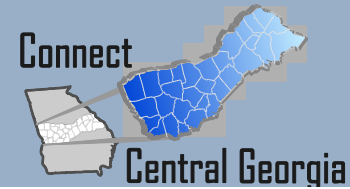


Scenario 2 – What if the demand for freight is stronger than expected?

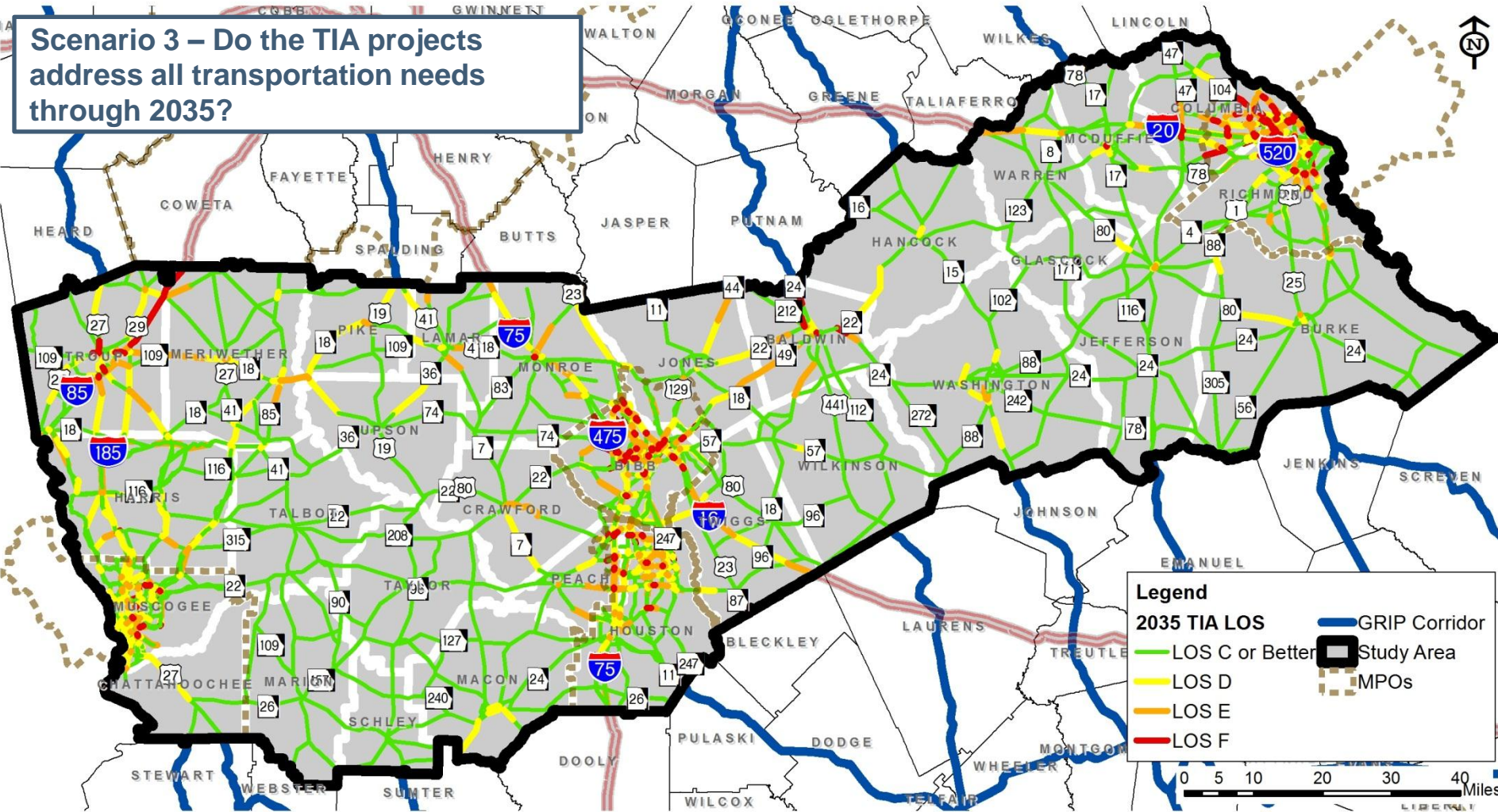




Future Conditions (2035) Scenario 3 Capacity Analysis



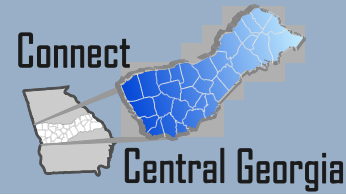
Scenario 3 – Do the TIA projects address all transportation needs through 2035?



- According to Federal* statistics, Central Georgia has lagged the State and U.S. in:
 - Population growth
 - Jobs growth
 - Unemployment rate
 - Wage and per capita income levels
 - Poverty levels
- Can transportation investments help create economic opportunity in the region?

Source: U.S. Census Bureau, American Community Survey 2006-2010 five-year estimates.

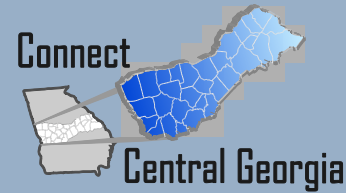
Economic Analysis Taking Stock of Central Georgia



- Multiple sources inform the economic analysis for Connect Central Georgia:
 - Regional Commission Interviews
 - Stakeholder Meeting Summaries
 - Statewide and Regional Studies
 - Federal Data Sources:
 - U.S. Census Bureau
 - U.S. Department of Agriculture
 - U.S. Department of Defense
 - U.S. Geological Survey

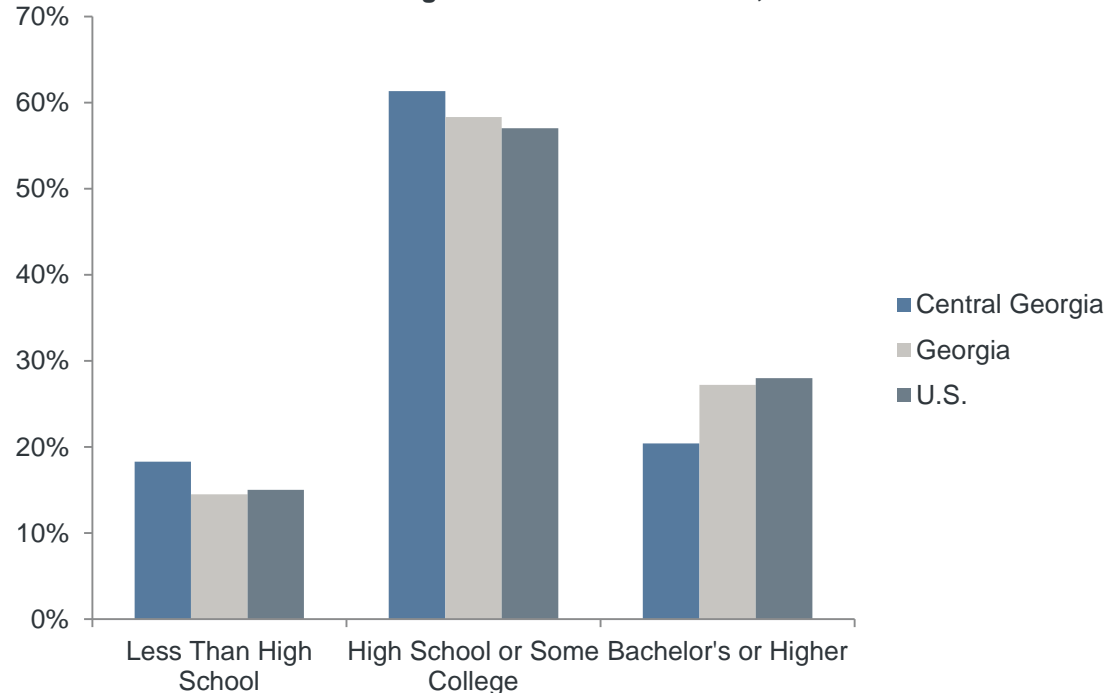
Economic Analysis

Economic Foundations of Area



- Education and Workforce was the #1 issue in Central Georgia regions as identified by *Georgia's Competitiveness Report*

Educational Attainment Is Lower in Central Georgia than the U.S. and State; Share of Adults over 25 Based on Education Level

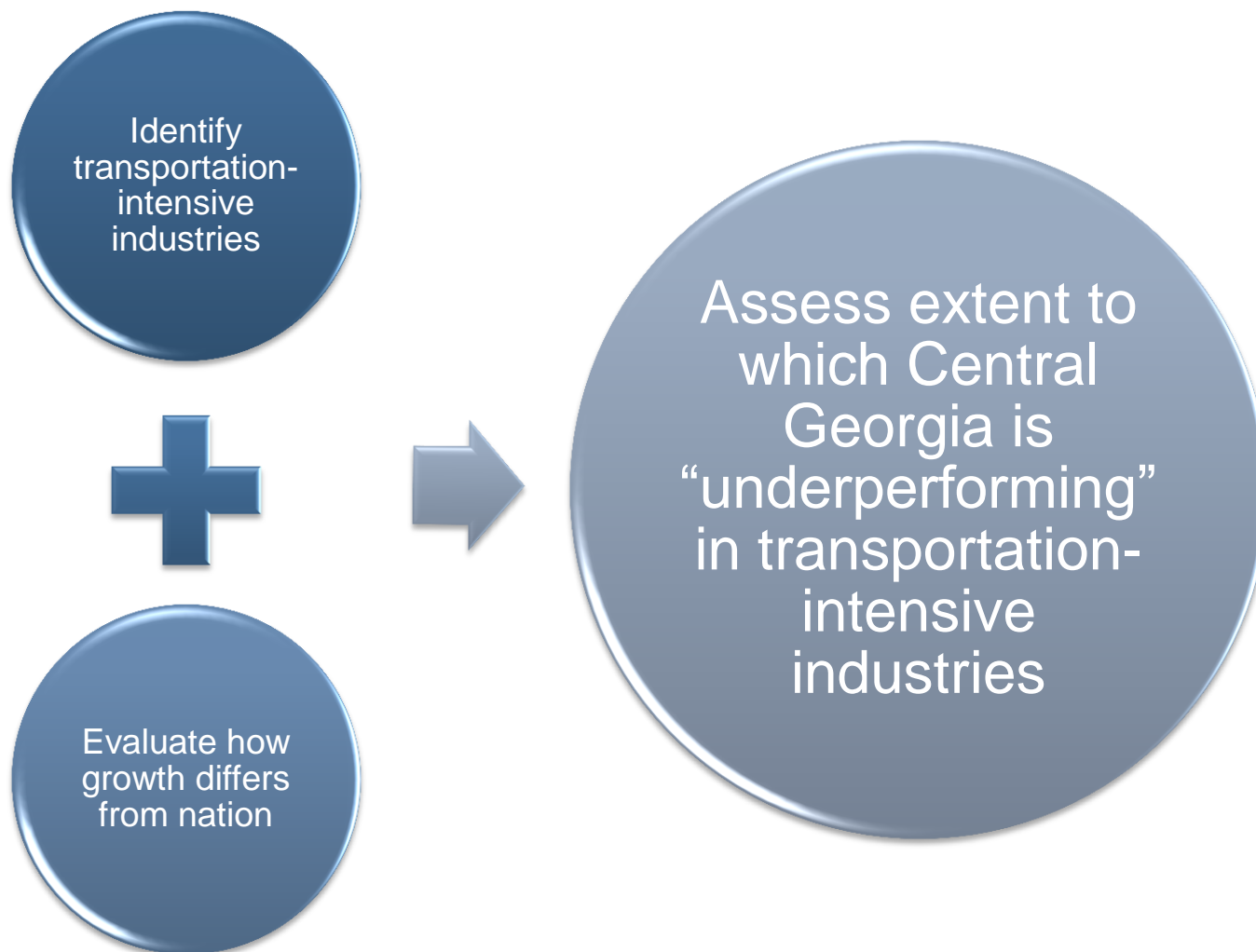
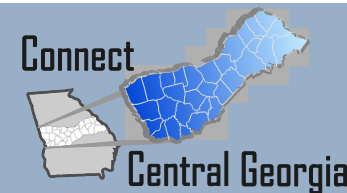


Source: U.S. Census Bureau, American Community Survey 2006-2010 five-year estimates.

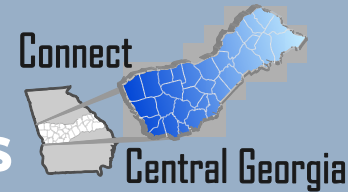
- Other issues affecting economic opportunity in Central Georgia include:
 - Lack of broadband access
 - Underutilized rail assets
- Central Georgia strengths:
 - Water resources
 - Available land
 - Proximity to major markets

Strengths bode well for logistics based development

Economic Analysis Employment Gap Analysis



Economic Analysis Transportation-Intensive Industries



Manufacturing

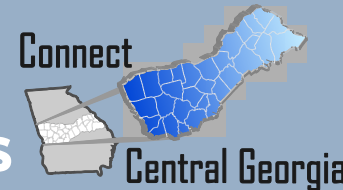
Agriculture

Defense

Mining

Logistics and
Distribution

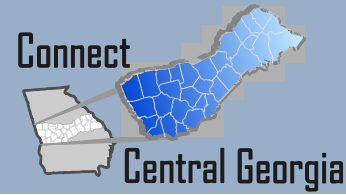
Economic Analysis Transportation-Intensive Industries



- What makes industries transportation-intensive?
 - Significant transportation inputs are required for these industries to produce their outputs (*source: Bureau of Transportation Statistics*)
 - Transportation is a significant factor in the cost of production for these industries. Labor and materials are other key factors.
 - Dependence on the movement of goods to receive supplies and ship their products
 - Serve markets well-beyond the region, bringing capital into Central Georgia
 - Defense depends on transportation to keep Central Georgia's military bases supplied and to move equipment and personnel - especially critical for combat readiness

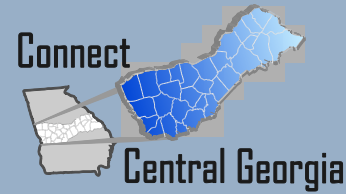
Economic Analysis

Identifying the Employment Gap



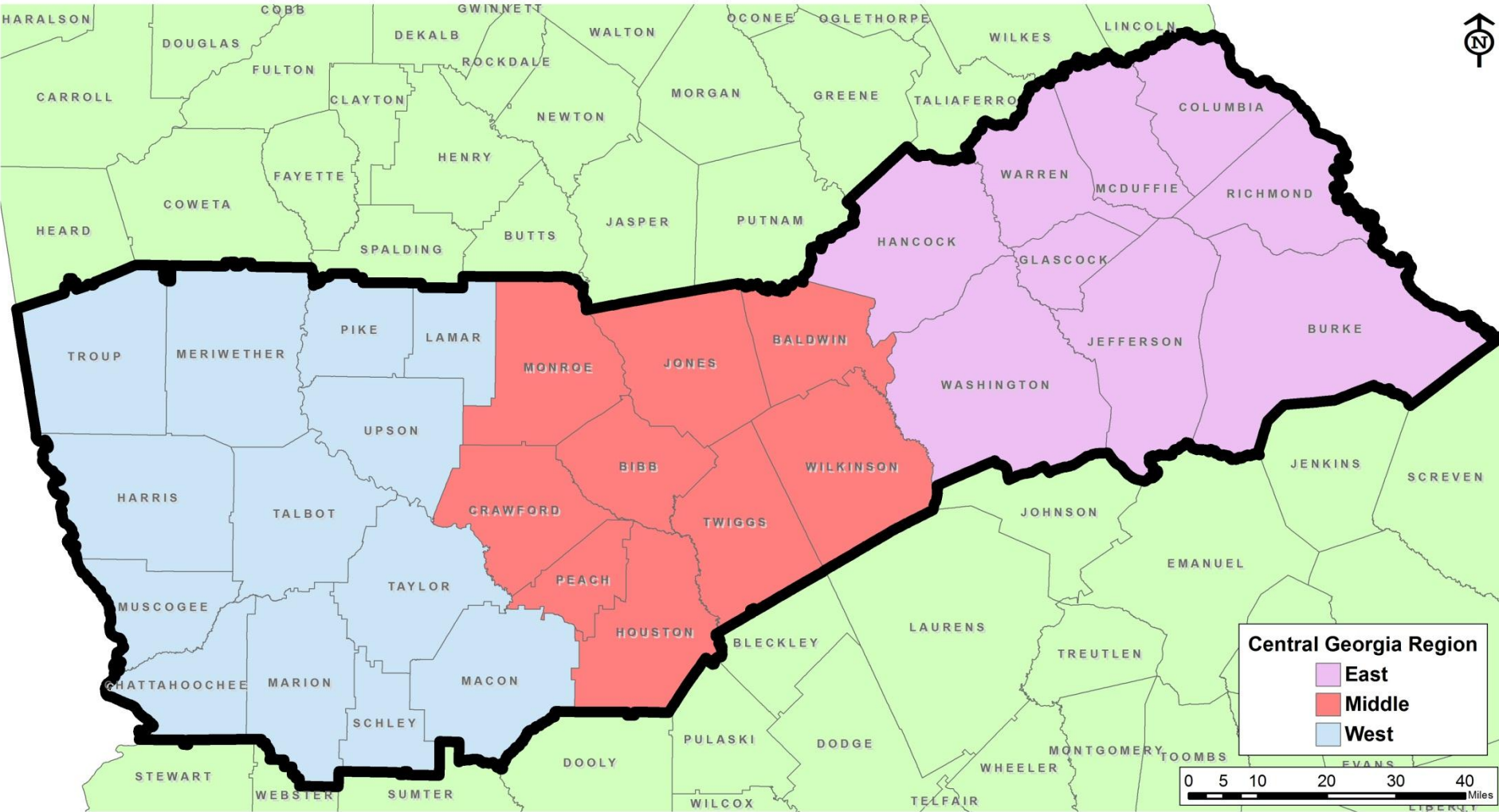
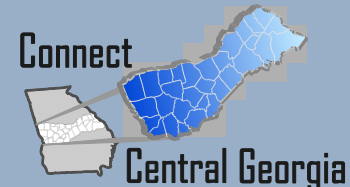
- Conduct competitive shift-share analysis
 - Measurement of how well specific industries are doing after accounting for national and regional growth trends
- Identify underperforming transportation intensive industries
 - Industries have a lower competitive share of growth in the region relative to national and statewide trends
- Calculate the employment gap
 - Estimate of the number of jobs required to “close the gap” with state and national trends

Economic Analysis Employment Gap Findings

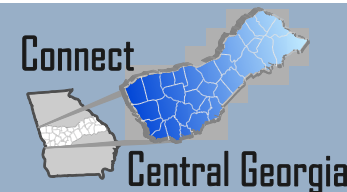


- Transportation intensive industries generally underperformed in Central Georgia
- Closing the gap could lead to significant economic benefits

Economic Analysis Regional Analysis Map



Economic Analysis West Georgia Results

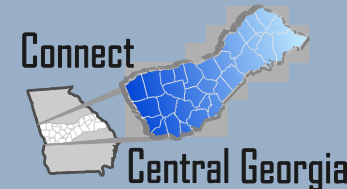


Industry	Gaps (-) or Gains (+) In Jobs Relative to US Trends 2000-2009	Average Annual Wage	Annual Wages Lost or Gained Corresponding to Industry Jobs Performance (in \$millions)
Manufacturing	-9,134	\$43,171	-\$394
Wholesale trade	-275	\$42,916	-\$12
Forestry, fishing, hunting, & agriculture support	+184	\$36,394	\$7
Transportation & warehousing	+847	\$33,767	\$29

Source: U.S. Census Bureau, County Business Patterns, 2000-2009; Data do not capture the new Kia plant, opened in late 2009.

- Closing the manufacturing and wholesale trade sectors gap leads to 9,500 jobs and \$400 million in added annual wages

Economic Analysis Middle Georgia Results

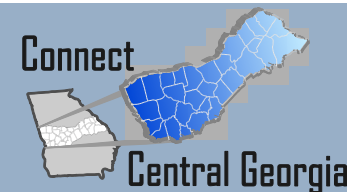


Industry	Gaps (-) or Gains (+) In Jobs Relative to US Trends 2000-2009	Average Annual Wage	Annual Wages Lost or Gained Corresponding to Industry Jobs Performance (in \$millions)
Manufacturing	-1,520	\$40,471	-\$62
Wholesale trade	+158	\$44,098	\$7
Forestry, fishing, hunting, & agriculture support	-25	\$40,451	-\$1
Transportation & warehousing	+1,472	\$33,516	\$49

Source: U.S. Census Bureau, County Business Patterns, 2000-2009; Data do not capture the new Kia plant, opened in late 2009.

- Closing the gap in manufacturing would create 1,500 jobs and \$62 million in added annual wages
- Relative gains in transportation & warehousing demonstrate that the region has become a favored location for distribution centers

Economic Analysis East Georgia Results

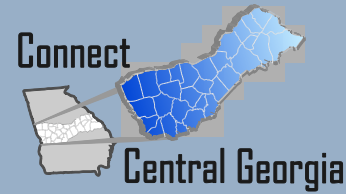


Industry	Gaps (-) or Gains (+) In Jobs Relative to US Trends 2000-2009	Average Annual Wage	Annual Wages Lost or Gained Corresponding to Industry Jobs Performance (in \$millions)
Manufacturing	-1,477	\$46,058	-\$68
Wholesale trade	+606	\$48,573	\$29
Forestry, fishing, hunting, & agriculture support	+59	\$34,437	\$2
Transportation & warehousing	-25	\$34,487	-\$1

Source: U.S. Census Bureau, County Business Patterns, 2000-2009; Data do not capture the new Kia plant, opened in late 2009.

- Closing the manufacturing and transportation & warehousing gap would create 1,500 jobs and \$69 million in added annual wages

Economic Case Studies



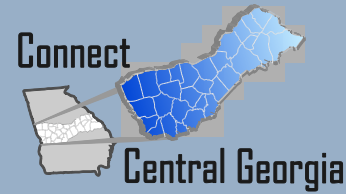
- Evaluated Three Potential Transportation Investments
 1. Enhancing the Macon to Lagrange connection
 2. Extending Sardis Church Road to I-16
 3. Assessment of the regional impacts of local improvements including completion of the Fall Line Freeway, a bypass around Wrens and operational improvements at several locations for freight (intersections/interchanges, safety improvements)

Connect

Central Georgia

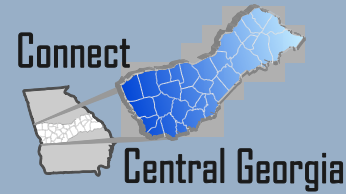


Economic Case Studies Macon to Lagrange Connection



- Facilitate a better connection between port and automotive plants and their suppliers
- Increase the footprint that warehousing and automotive suppliers could locate
- Enhance access to the northeastern portion of the study area

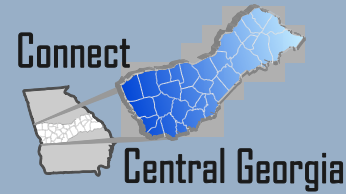
Economic Case Studies Sardis Church Rd Extension



- Improve the movement of trucks servicing agriculture and natural resource industries such as kaolin
- Enhance the attractiveness to exporting industries (manufacturing, warehousing, distribution) by providing a more direct link to the Ports
- Improve flow of traffic south of Macon and enhance connectivity to the Middle GA Regional Airport
- Improve access to Robins Air Force Base
 - Approximately 1,000 trucks and 24,000 cars arrive at the base daily

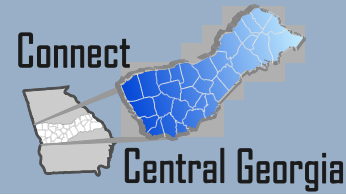
Economic Case Studies

Completing the Fall Line Freeway



- Complement the growing energy industry
 - New clean coal plant planned in Washington County
 - Two new nuclear reactors are being constructed near Waynesboro (Plant Vogtle)
 - New biomass (uses lumber/wood scraps and tires) plant planned for Jefferson County
- Provide better connectivity to additional markets
- Improve traffic in downtown Wrens
- Improved connectivity for Augusta's Bush Airport

Economic Analysis Next Steps

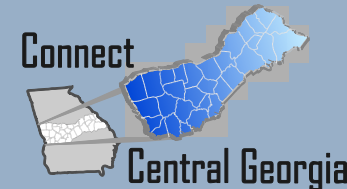


- Estimate land development opportunities impacted by case study investments
- Combine land development opportunities with gap analysis findings to estimate potential strategic economic opportunity arising from investments
- Estimate transportation benefits from investments to derive economic efficiency benefits



- What are the right type of improvements in Central Georgia?
 - New facilities
 - Expand existing facilities
 - Operational / safety improvements
 - Maintain and manage current facilities
 - Diversify modes

Development of Improvement Strategies



Implementing Agency

Level 1

- Land Use Policies / Regulations
- Telecommuting / Alternative Work Week
- Trip Reduction Ordinances

County
Municipalities

Level 2

- Transit Facilities (Bus, Rail)
- Bicycle & Pedestrian Facilities

GDOT/GRTA
MPO
Municipalities
County

Level 3

- Carpooling
- Vanpooling Programs
- The Clean Air Campaign / Commute Options

GDOT/GRTA
MPO
Municipalities
County

Level 4

- Intersection Widening
- Frontage Roads
- Median Control
- Signalization Improvements

GDOT
MPO
Municipalities
County

Level 5

- Additional Lanes

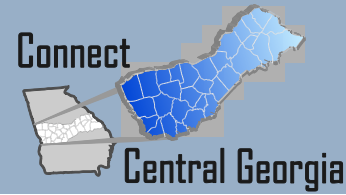
GDOT
MPO

Performance
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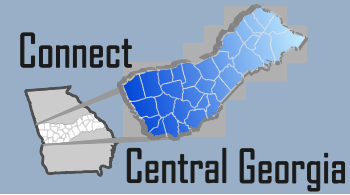
Next Steps



- Continue Public Outreach
 - Targeted Kiosk Events
 - Website
- Develop Preliminary Improvements
- Analyze Impacts of Preliminary Improvements
- Prioritize Improvements
- Final meeting in late Summer



Questions?



Website: www.dot.ga.gov/connectcentralgeorgia